

In the Claims:

1. (Currently Amended) Process for producing a fuel cell stack with the following steps:

- a) stacking the fuel cells into an assembled fuel cell stack (1), and
- b) joining the fuel cell stack (1) as the assembled fuel cell stack (1) is heated and compressed,

characterized in that compression of the assembled fuel cell stack ~~encompasses~~ is performed by application of at least one controlled force component (F) to the assembled fuel cell stack (1).

2. (Currently Amended) Process as claimed in claim 1, wherein the ~~control of at least one~~ application of at least one controlled force component (F) includes ~~[[the]]~~ bracing of the assembled fuel cell stack (1) ~~which has been based upon forces~~ detected by way of at least one force sensor (8.4).

3. (Currently Amended) Process as claimed in claim 1, ~~[[or 2,]]~~ wherein the ~~control of at least one~~ application of at least one controlled force component (F) includes ~~[[the]]~~ detecting a change of the dimensions of the assembled fuel cell stack (1) ~~which has been detected~~ by way of at least one distance sensor (8.5).

4. (Currently Amended) Process as claimed in claim 1, ~~one of the preceding claims~~, wherein at least one controlled force component is produced by at least one of a compression ~~and/or~~ and a tension means (8.1) and is transmitted ~~preferably by way of at least one tie rod (1.4)~~ to the assembled fuel cell stack (1).

5. (Currently Amended) Process as claimed in claim 4, wherein at least one of a compression and a tension means is connected to at least one tie rod (8.1) that extends through ~~[[the]]~~ a recess (1.5) provided in the assembled fuel cell stack (1) and which transmits the at least one controlled force component to the assembled fuel cell stack.

6. (Currently Amended) Process as claimed in claim 1, ~~one of the preceding claims, wherein it furthermore comprises~~ comprising the following step ~~which is carried out during and/or after the step b):~~

(e) the further step of checking the already at least partially joined fuel cell stack (1) for gas-tightness at least one of during and after said joining step. ~~gas-tightness.~~

7. (Currently Amended) Process as claimed in claim 6, wherein ~~step e)~~ said checking step comprises ~~the fact that~~ flooding the fuel cell stack (1) ~~is flooded~~ with a gas, preferably with an inert test gas, and that detecting possible leaks of the fuel cell stack (1) ~~are detected~~ by way of a drop in gas pressure.

8. (Currently Amended) Process as claimed in claim 7, wherein, in the case of detected leakage of the fuel cell stack (1), the fuel cell stack (1) is at least one of further heated ~~and/or the fuel cell stack (1) is~~ and further compressed.

9. (Currently Amended) Process as claimed in claim 1, ~~comprising the further step, one of the preceding claims, which is carried out~~ at least one of during and after said joining step, of and/or after step b) and preferably during and/or after step e):

[[d)]] chemical forming of the fuel cells (1.3) of the fuel cell stack (1) by adding a reducing gas, especially ~~a reducing gas mixture such as hydrogen and nitrogen,~~ to the fuel cells (1.3) of the fuel cell stack (1).

10. (Currently Amended) Process as claimed in claim 9, wherein ~~[[the]]~~ a change in the volume of the fuel cell stack (1) caused by said chemical forming step ~~[[d)]]~~ is at least partially balanced by corresponding compression of the fuel cell stack (1).

11. (Currently Amended) Process as claimed in claim 9, ~~[[or 10,]]~~ wherein it ~~furthermore comprises the following~~ the chemical forming step ~~which is carried out after step d):~~

[[e)]] testing of the electrical serviceability of the fuel cell stack (1) is performed.

12. (Currently Amended) Process as claimed in claim 11, wherein ~~execution of step e)~~ the testing step comprises ~~the fact that the~~ supplying an anode side of the fuel cell stack (1) ~~is~~ supplied with a combustible gas and ~~the a~~ a cathode side of the fuel cell stack (1) ~~is supplied~~ with a cathode gas, and ~~that the~~ measuring at least one of a voltage which forms in the fuel cell stack ~~and (1) and/or a current which can be taken from the fuel cell stack is/are measured.~~

13. (Currently Amended) Process as claimed in claim ~~5~~, 4, ~~wherein it furthermore comprises the following step:~~

[[f)] comprising the further step of connecting the at least one tie rod (1.4) to at least one locking element (1.6) which at least roughly maintains the bracing of the fuel cell stack (1) even when at least one tie rod (1.4) is loosened from the at least one of a compression and a tension means ~~compression and/or tension means (8.1).~~

14. (Currently Amended) Process as claimed in claim 9, ~~one of the preceding claims;~~ wherein at least the joining and chemical forming steps b) and d), but preferably at least steps b), e), d) and e) are carried out in a gastight process chamber, (1), ~~preferably without opening the process chamber (11) in the interim.~~

15. (Currently Amended) Device for producing a fuel cell stack (1), ~~especially a device for executing the process as claimed in one of claims 1 to 14, with~~ comprising a heating means (3) for heating an assembled fuel cell stack (1) and a means (8) for compressing the assembled fuel cell stack (1), wherein the means (8) for compression of the assembled fuel cell stack (1) comprises at least one of a compression and/or and a tension means (8.1) ~~which is suited to for~~ applying at least one controlled force component (F) to the assembled fuel cell stack (1).

16. (Currently Amended) Device as claimed in claim 15, wherein a control means (8.6) is assigned to the comprises at least one of a compression and/or and a tension means (8.1) for controlling the at least one force component (F) ~~and it controls at least one force component (F)~~ depending on [[the]] at least one of bracing of the assembled fuel cell stack (1) which has been detected by way of at least one force sensor (8.4) ~~and/or as a function of the a change of [[the]]~~

dimension of the assembled fuel cell stack (1) which is detected by way of at least one distance sensor (8.5).

17. (Currently Amended) Device as claimed in claim 16, wherein the at least one of a compression and/or tension means (8.1) is suited connected to a tie rod for applying the at least one controlled force component (F) to the assembled fuel cell stack, ~~(1) by way of a tie rod (1.4).~~

18. (Currently Amended) Device as claimed in claim 15, ~~one of claims 15 to 17~~, wherein it ~~has~~ a gastight process chamber ~~(11) which~~ is provided for holding the assembled fuel cell stack (1) and a gas supply means ~~(7,9) which is intended~~ provided for flooding at least one of the process chamber (11) and/or and the fuel cell stack ~~(1) which is located~~ in the process chamber with gas.

19. (Currently Amended) Device as claimed in claim 18, ~~wherein it has~~ further comprising a gas exhaust means (10).

20. (Currently Amended) Device as claimed in claim 15, ~~one of claims 15 to 19~~, ~~wherein it has~~ further comprising an electrical test means (6).

21. (Currently Amended) Device as claimed in claim 15, ~~one of claims 18 to 20~~, wherein it ~~has~~ a plurality of movable gastight process chambers (11) provided for holding a respective assembled fuel cell stack which are ~~designed to be~~ moved to different treatment stations for executing individual fuel cell stack production steps.

22. (Original) Device as claimed in claim 21, wherein the plurality of gastight process chambers (11) are arranged in the form of a carousel.